

A B S T R A C T

In a configuration according to a short-range radar of the present invention and a method of controlling the same, the timing at which a variable-period pulse output from a variable-period pulse generator including a direct digital synthesizer (DDS) has shifted in level first since reception of a search instruction is used as a reference timing, so that a signal that shifts in level at the reference timing or a fixed lapse of time later than the reference timing is generated and output as a transmission trigger signal, and a signal that shifts in level at a timing delayed by half a period of the variable-period pulse or its integral multiple from the timing at which the transmission trigger signal is output is generated and output as a reception trigger signal. With this, by varying beforehand frequency data of the DDS based on the relationship between the frequency data and delay time between transmission and reception stored in a memory, it is possible to vary delay time between the transmission trigger signal and the reception trigger signal. It is thus possible to arbitrarily vary the delay time between transmission and reception at a high time resolution by using a simple configuration and low power dissipation.